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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,062	11/27/2001	Kazuhiro Suga	CU-2734 RJS	9540

26530 7590 05/01/2003

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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,062

Applicant(s)

SUGA ET AL.

Examiner

Lawrence D Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

DETAILED ACTION

Response to Election

1. This action is in response to the election, mailed February 24, 2003. Claims 1-6 were elected rendering Claims 1-6 pending, with claims 7-10 held to a non-elected invention.

Claim Rejections – 35 USC § 103(a)

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spa (U.S. 6,537,359).

4. Spa discloses an electromagnetic wave shielding material applied to a substrate (column 1, lines 4-14) and teaches lamination and applying a conductive ink by means of printing (column 1, lines 25-31). Spa discloses the conductive ink is applied to a part in the form of a grid or another functional pattern (column 1, lines 38-40), which is analogous to net-wise, as depicted in Figure 2. Spa discloses an ink or paint, which is used for applying electromagnetic shielding layer to a moulded part (column 2, lines 44-47) being plate-shaped (column 4, lines 31-32). The reference discloses the material contains polyols and isocyanate (column 5, lines 59-61). In claims 4-6, the phrase '...used as a vehicle of the ink

forming the conductive ink layer in the electromagnetic wave-shielding sheet' is directed to intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Furthermore, intended use is given little patentable weight. Additionally, in claim 1, '...prepared by forming a conductive ink layer on one surface of a base material sheet by printing, on at least one plate surface of a panel section formed of a mixed material...' is a product by process claim limitation. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966. Spa does not explicitly disclose polyol being a major component. It would have been obvious to one of ordinary skill in the art for the polyol to be the main component of the wave-shielding material if there are only fillers or additives present in the composition.

Claim Rejections – 35 USC § 103(a)

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spa (U.S. 6,537,359) in view of Nagano et al (U.S. 5,455,117) further in view of Okada et al (U.S. 6,448,492).

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6. Claims 1-2 and 4-6 are relied upon as indicated above. Spa does not disclose a line width of 0.5mm or more or an opening ratio of 30% or more. Nagano teaches an electromagnetic wave reflection preventing material shielding electromagnetic waves (column 2, lines 10-13) having a line width of 500micrometers (0.5mm) of an electrically conductive ink (column 16, lines 25-26). Additionally, Okada discloses an electromagnetic wave shielding material (column 2, lines 24-27) having an opening ratio 60 to 90% (column 9, lines 40-45). All the references are analogous because they are from the field of electromagnetic wave shielding materials. It would have been obvious to one of ordinary skill in the art to include the line width and opening ratio of Nagano and Okada in the conductive ink layer of Spa because Nagano teaches the line width of the electrically conductive ink varies in examples 14-17 and Okada teaches a open area gives a rectangular or square lattice like openings, which give more effective shielding properties (column 9,lines 16-45).

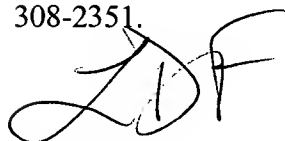
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 11-356543 discloses electromagnetic shielding composed of a printed pattern formed by printing a conductive ink composition and then forming a layer by electrical plating (abstract).

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Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is (703) 305-9978. The examiner can normally be reached on Monday through Friday 8:30 AM – 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. Please allow the examiner twenty-four hours to return your call.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.



Lawrence D. Ferguson
Examiner
Art Unit 1774

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

